SAMSUNG

BD-H5900

Blu-ray™ Disc Player

user manual

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ENGLISH

Safety Information

Warning

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE COVER (OR BACK).
NO USER-SERVICEABLE PARTS ARE INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	
This symbol indicates "dangerous voltage" inside the product that presents a risk of electric shock or personal injury.	**CAUTION**: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.	This symbol indicates important instructions accompanying the product.

Do not install this equipment in a confined space such as a bookcase or similar unit.

WARNING

To prevent damage which may result in fire or electric shock hazard, do not expose this appliance to rain or moisture.

CAUTION

Blu-ray Disc Player USES AN INVISIBLE LASER BEAM WHICH CAN CAUSE HAZARDOUS RADIATION EXPOSURE IF DIRECTED. BE SURE TO OPERATE Blu-ray Disc Player CORRECTLY AS INSTRUCTED.

CAUTION

THIS PRODUCT UTILIZES A LASER.
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE. DO NOT OPEN COVERS AND DO NOT REPAIR YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL.

This product satisfies CE regulations when shielded cables and connectors are used to connect the unit to other equipment.
To prevent electromagnetic interference with electric appliances, such as radios and televisions, use shielded cables and connectors for connections.

IMPORTANT NOTE

The mains lead on this equipment is supplied with a molded plug incorporating a fuse. The value of the fuse is indicated on the pin face of the plug.
If it requires replacing, a fuse approved to BS1362 of the same rating must be used.
Never use the plug with the fuse cover omitted if the cover is detachable. If a replacement fuse cover is required, it must be of the same colour as the pin face of the plug. Replacement covers are available from your dealer.

If the fitted plug is not suitable for the power points in your house or the cable is not long enough to reach a power point, you should obtain a suitable safety approved extension lead or consult your dealer for assistance.
However, if there is no alternative to cutting off the plug, remove the fuse and then safely dispose of the plug. Do not connect the plug to a mains jack, as there is a risk of shock hazard from the bared flexible cord.
To disconnect the apparatus from the mains, the plug must be pulled out from the mains socket, therefore the mains plug shall be readily operable.
The product unit accompanying this user manual is licenced under certain intellectual property rights of certain third parties.

CLASS 1 LASER PRODUCT

This Compact Disc player is classified as a CLASS 1 LASER product. Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

CAUTION :

- CLASS 3B VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO THE BEAM (IEC 60825-1)
- THIS PRODUCT UTILIZES A LASER. USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE. DO NOT OPEN COVER AND DO NOT REPAIR YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL.

CLASS 1	**LASER PRODUCT**
KLASSE 1	**LASER PRODUKT**
LUOKAN 1	**LASER LAITE**
KLASS 1	**LASER APPARAT**
PRODUCTO	**LÁSER CLASE 1**

Precautions

Important Safety Instructions

Read these operating instructions carefully before using the unit. Follow all the safety instructions listed below.
Keep these operating instructions handy for future reference.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including AV receivers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where it exits the apparatus.
11. Only use attachments/accessories specified by the manufacturer.

12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as when the power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Disc Storage & Management

- Holding Discs
  - Fingerprints or scratches on a disc may reduce sound and picture quality or cause skipping

  - Avoid touching the surface of a disc where data has been recorded.
  - Hold the disc by the edges so that fingerprints will not get on the surface.
  - Do not stick paper or tape on the disc.
- Cleaning Discs
  - If you get fingerprints or dirt on a disc, clean it with a mild detergent diluted in water and wipe with a soft cloth.

  - When cleaning, wipe gently from the inside to the outside of the disc.
- Disc Storage
  - Do not keep in direct sunlight.
  - Keep in a cool ventilated area.
  - Keep in a clean protection jacket and store vertically.

Handling Cautions

- Do not expose this apparatus to dripping or splashing. Do not put objects filled with liquids, such as vases on the apparatus.
- To turn this apparatus off completely, you must pull the power plug out of the wall socket. Consequently, the power plug must be easily and readily accessible at all times.
- Do not plug multiple electric devices into the same wall socket. Overloading a socket can cause it to overheat, resulting in a fire
- Before connecting other components to this player, be sure to turn them off.
- If you move your player suddenly from a cold place to a warm place, condensation may occur on the operating parts and lens and cause abnormal disc playback. If this occurs, unplug the player, wait for two hours, and then connect the plug to the power outlet. Then, insert the disc, and try to play back again.
- If the product makes an abnormal noise or produces a burning smell or smoke, turn off the power switch immediately and disconnect the power plug from the wall outlet. Then, contact the nearest customer service centre for technical assistance. Do not use the product. Using the product as it is may cause a fire or an electric shock.

Using the 3D function

IMPORTANT HEALTH AND SAFETY INFORMATION FOR 3D PICTURES.
Read and understand the following safety information before using the 3D function.

- Some viewers may experience discomfort while viewing 3D TV such as dizziness, nausea, and headaches.
  If you experience any such symptom, stop viewing 3D TV, remove the 3D Active Glasses, and rest.
- Watching 3D images for an extended period of time may cause eye strain. If you feel eye strain, stop viewing 3D TV, remove your 3D Active Glasses, and rest.
- A responsible adult should frequently check on children who are using the 3D function. If there are any reports of tired eyes, headaches, dizziness, or nausea, have the child stop viewing 3D TV and rest.
- Do not use the 3D Active Glasses for other purposes (Such as general eyeglasses, sunglasses, protective goggles, etc.).
- Do not use the 3D function or 3D Active Glasses while walking or moving around. Using the 3D function or 3D Active Glasses while moving around may cause you to bump into objects, trip, and/or fall, and cause serious injury.
- If you want to enjoy 3D content, connect a 3D device (3D compliant AV receiver or TV) to the player's HDMI OUT port using a high-speed HDMI cable. Put on 3D glasses before playing the 3D content.
- The player outputs 3D signals only through HDMI cable connected to the HDMI OUT port.
- As the video resolution in 3D play mode is fixed according to the resolution of the original 3D video, you can not change the resolution to your preference.
- Some functions such as BD Wise, screen size adjustment, and resolution adjustment may not operate properly in 3D play mode.
- You must use a high-speed HDMI cable for proper output of the 3D signal.
- Stay at least three times the width of the screen from the TV when watching 3D images. For example, if you have a 46-inch screen, stay 138 inches (11.5 feet) from the screen.
- Place the 3D video screen at eye level for the best 3D picture.
- When the player is connected to some 3D devices, the 3D effect may not function properly.
- This player does not convert 2D content into 3D.
- "Blu-ray 3D" and "Blu-ray 3D" logo are trademarks of the Blu-ray Disc Association.

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Contents

SAFETY INFORMATION

Warning 2
Precautions 2
Disc Storage & Management 3
Handling Cautions 3
Using the 3D function 3
Copyright 3

GETTING STARTED

Before using the User Manual 4
Logos of Discs the player can play 5
Accessories 6
Front Panel 7
Rear Panel 7
Remote Control 7

CONNECTIONS

Connecting to a TV 8
Connecting to an Audio System 8
Connecting to a Network Router 9

SETTINGS

The Initial Settings Procedure 10
Menu Navigation 10
Accessing the Settings Menu 10
Display Settings 10
Audio Settings 12
Network Settings 13
System Settings 16
Language Settings 16
Security Settings 16
General Settings 17
Support Settings 17

MEDIA PLAY

Playing a Commercially Recorded Disc 18
Playing Files on a USB Device 18
Playing a Disc with User Recorded Content 18
Playing Content Located on Your PC or AllShare Device through the Blu-ray Disc Player 19
Controlling Video Playback 19
Controlling Music Playback 19
Playing Photo Contents 21

APPENDIX

Troubleshooting 21
Specifications 23

Getting Started

Before using the User Manual

Disc Types and Contents your player can play

Media	Disc Type	Details
VIDEO	Blu-ray Disc 3D Blu-ray Disc	BD-ROM or BD-RE/-R recorded in the BD-RE format.
	DVD-VIDEO DVD-RW DVD-R DVD+RW DVD+R	DVD-VIDEO, recorded DVD+RW/DVD-RW(V)/DVD-R/+R that have been recorded and finalized, or a USB storage media containing DivX, MKV or MP4 contents.
MUSIC	CD-RW/-R, DVD-RW/-R, BD-RE/-R	Music recorded on CD-RW/-R, DVD-RW/-R, BD-RE/-R or a USB storage media containing MP3 or WMA contents.
PHOTO	CD-RW/-R, DVD-RW/-R, BD-RE/-R	Photos recorded on CD-RW/-R, DVD-RW/-R, BD-RE/-R or a USB storage media containing JPEG contents.

✎ NOTES

- The player may not play certain CD-RW/-R and DVD-R because of the disc type or recording conditions.
- If a DVD-RW/-R has not been recorded properly in DVD video format, it will not be playable.
- Your player will not play content that has been recorded on a DVD-R at a bit-rate that exceeds 10 Mbps.
- Your player will not play content that has been recorded on a BD-R or USB device at a bit rate that exceeds 25 Mbps.
- Playback may not work for some types of discs, or when you use specific functions, such as angle change and aspect ratio adjustment. Information about the discs is written in detail on the disc box. Please refer to this if necessary.
- When you play a BD-J title, loading may take longer than a normal title or some functions may perform slowly.

Disc types your player cannot play

- HD DVD
- DVD-ROM/PD/MV, etc
- DVD-RAM
- Super Audio CD (except CD layer)
- DVD-RW (VR mode)
- CVD/CD-ROM/CDV/CD-G/CD-I/LD (CD-Gs play audio only, not graphics.)
- 3.9 GB DVD-R for Authoring.

Region Code

Both players and discs are coded by region.

These regional codes must match for a disc to play. If the codes do not match, the disc will not play.

The Region Number for this player is displayed on the rear panel of the player.

Disc Type	Region Code	Area
Blu-ray Disc	A	North America, Central America, South America, Korea, Japan, Taiwan, Hong Kong and South East Asia.
	B	Europe, Greenland, French territories, Middle East, Africa, Australia and New Zealand.
	C	India, China, Russia, Central and South Asia.
DVD-VIDEO	1	The U.S., U.S. territories and Canada
	2	Europe, Japan, the Middle East, Egypt, Africa, Greenland
	3	Taiwan, Korea, the Philippines, Indonesia, Hong Kong
	4	Mexico, South America, Central America, Australia, New Zealand, Pacific Islands, Caribbean
	5	Russia, Eastern Europe, India, North Korea, Mongolia
	6	China

Logos of Discs the player can play

Blu-ray Disc	BD-LIVE
3D Blu-ray Disc	DivX

PAL

PAL broadcast System in U.K., France, Germany, etc.

Supported File Formats

Notes on the USB connection

- Your player supports USB storage media, MP3 players, digital cameras, and USB card readers.
- The player does not support folder or file names longer than 128 characters.
- Some USB/External HDD/digital camera devices may not be compatible with the player.
- Your player supports the FAT16, FAT32, and NTFS file systems.
- Connect USB devices directly to the player's USB port. Connecting through a USB cable may cause compatibility problems.
- Inserting more than one memory device into a multi-card reader may cause the reader to operate improperly.
- The player does not support the PTP protocol.
- Do not disconnect a USB device during a "loading" process.
- The bigger the image resolution, the longer the image takes to display.
- This player cannot play MP3 files with DRM (Digital Rights Management) downloaded from commercial sites.
- Your player only supports video with a frame rate under 30fps (frames per second).
- Your player only supports USB Mass Storage Class (MSC) devices such as thumb drives and USB HDD. (HUB is not supported.)
- Certain USB HDD Devices, multi-card readers and thumb drives may not be compatible with this player.
- If some USB devices require excessive power, they may be limited by the circuit safety device.
- If playback from a USB HDD is unstable, provide additional power by plugging the HDD into a wall socket.
  If the problem continues, contact the USB HDD manufacturer.
- SAMSUNG is not responsible for any data file damage or data loss.
- Your player does not support NTFS compressed files, sparse files, or encrypted files.
- You can repair or format a USB device on your Desktop PC. (MS-Windows OS only)

Video File Support

File Extension	Container	Video Codec	Audio Codec	Resolution
*.avi	AVI	DivX 3.11/4/5/6	MP3 Dolby Digital DTS WMA PCM	1920x1080
		MP4v3		
		H.264 BP/MP/HP		1920x1080
*.mkv	MKV	VC-1 AP	MP3 Dolby Digital DTS	1920x1080
		H.264 BP/MP/HP		1920x1080
*.wmv	WMV (wmv9)	VC-1 AP	WMA	1920x1080
		VC-1 SM		1920x1080
*.mp4	MP4	MP4 (mp4v)	AAC	1920x1080
		H.264 BP/MP/HP		1920x1080
*.mpg *.mpeg	PS	MPEG1	MP1, 2 Dolby Digital DTS	1920x1080
		MPEG2		1920x1080
		H.264 BP/MP/HP		1920x1080
*.rmvb	RMVB	RV8/9/10 (RV30/40)	RealAudio 6	1920x1080

- **Limitations**
  - Even when a file is encoded by a supported codec listed above, the file might not be played if its content has a problem.
  - Normal playback is not guaranteed if the file's container information is wrong or the file itself is corrupted.
  - Files having a higher Bit rate/frame rate than standard may stutter during sound/video playback.
  - The Seek (skip) function is not available if the file's index table is damaged.
  - Depending on your country, RMVB format may not be supported.

- **Video decoder**
  - Supports up to H.264 Level 4.1 and AVCHD
  - Does not support H.264 FMO/ASO/RS and VC1 SP/MP/AP L4
  - MPEG4 SP, ASP :
    Below 1280 x 720 : 60 frames max
    Above 1280 x 720 : 30 frames max
  - Does not support GMC 2 or higher

- **Audio decoder**
  - Supports WMA 7, 8, 9 and STD
  - Does not support WMA sampling rate of 22050Hz mono.
  - AAC: Max sampling rate: 96Khz (8, 11, 12, 16, 22,24, 32,44.1, 48, 64, 88.2, 96)
    Max bit rate: 320kbps

■ Supported DivX subtitle file formats

*.ttxt, *.smi, *.srt, *.sub, *.txt

✎ **NOTES**

- Playback of some DivX, MKV or MP4 file may not be supported depending on their video resolution and frame rate.

Music File Support

File Extension	Container	Audio Codec	Support Range
*.mp3	MP3	MP3	-
*.wma	WMA	WMA	* Sampling rates (in kHz) - 8, 11, 16, 22, 32, 44.1, 48 * Bit rates - All bit-rates from 5kbps to 355kbps

Picture File Support

File Extension	Type	Resolution
*.jpg *.jpeg *.jpe	JPEG	15360x8640
*.png	PNG	15360x8640

AVCHD (Advanced Video Codec High Definition)

- This player can play back AVCHD format discs. These discs are normally recorded and used in camcorders.
- The AVCHD format is a high definition digital video camera format.
- The MPEG-4 AVC/H.264 format compresses images with greater efficiency than the conventional image compressing format.
- Some AVCHD discs use the "x.v.Color" format. This player can play back AVCHD discs that use "x.v.Color" format.
- "x.v.Color" is a trademark of Sony Corporation.
- "AVCHD" and the AVCHD logo are trademarks of Matsushita Electronic Industrial Co., Ltd. and Sony Corporation.

✎ **NOTES**

- Some AVCHD format discs may not play, depending on the recording condition.
  AVCHD format discs need to be finalized.
- "x.v.Color" offers a wider colour range than normal DVD camcorder discs.

Accessories

Check for the supplied accessories shown below.

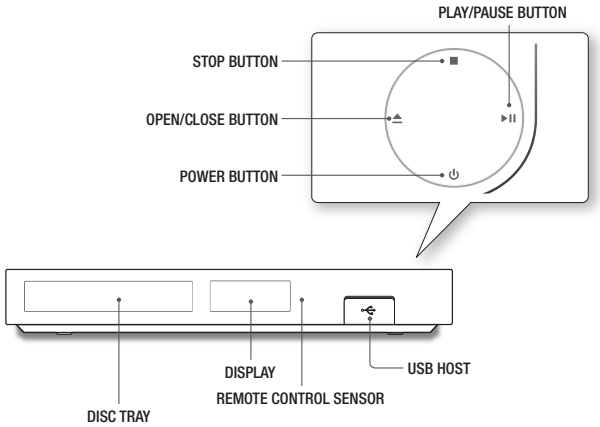
HDMI Cable

Batteries for Remote Control (AAA Size)

User Manual

Remote Control

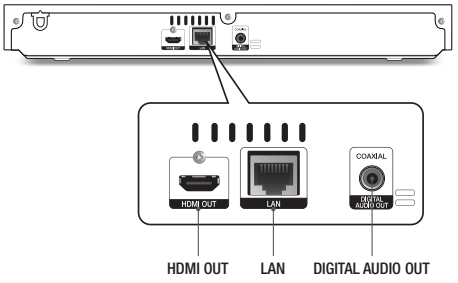
Front Panel



NOTES

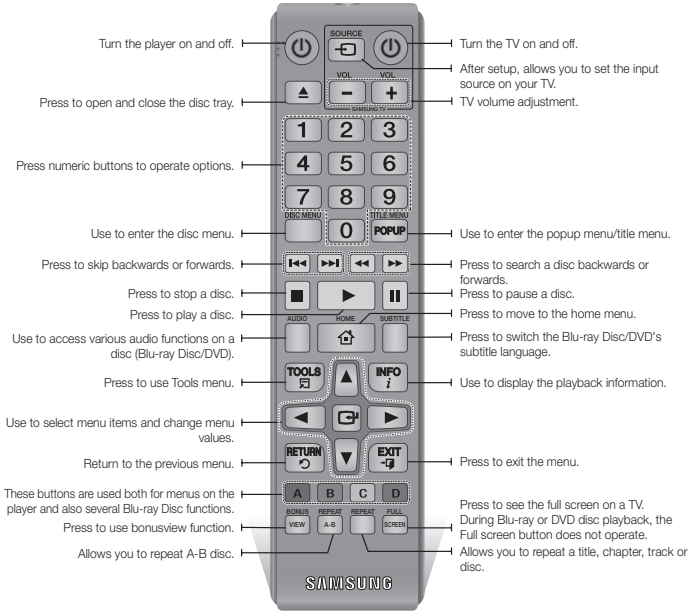
- When the player displays the Blu-ray Disc menu, you cannot start the movie by pressing the Play button on the player or the remote. To play the movie, you must select Play Movie or Start in the disc menu, and then press the button.
- You can perform software upgrades using the USB Host jack with a USB flash memory stick only.

Rear Panel

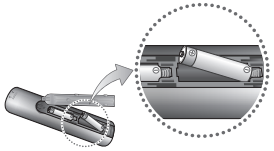


Remote Control

Tour of the Remote Control


Turn the player on and off.
Press to open and close the disc tray.
Press numeric buttons to operate options.
Use to enter the disc menu.
Press to skip backwards or forwards.
Press to stop a disc.
Press to play a disc.
Use to access various audio functions on a disc (Blu-ray Disc/DVD).
Press to use Tools menu.
Use to select menu items and change menu values.
Return to the previous menu.
These buttons are used both for menus on the player and also several Blu-ray Disc functions.
Press to use bonusview function.
Allows you to repeat A-B disc.
Turn the TV on and off.
After setup, allows you to set the input source on your TV.
TV volume adjustment.
Use to enter the popup menu/title menu.
Press to search a disc backwards or forwards.
Press to pause a disc.
Press to move to the home menu.
Press to switch the Blu-ray Disc/DVD's subtitle language.
Use to display the playback information.
Press to exit the menu.
Press to see the full screen on a TV. During Blu-ray or DVD disc playback, the Full screen button does not operate.
Allows you to repeat a title, chapter, track or disc.
SOURCE
VOL
DISC MENU
TITLE MENU
POPUP
AUDIO
HOME
SUBTITLE
TOOLS
INFO
RETURN
EXIT
A
B
C
D
BONUS VIEW
REPEAT A-B
REPEAT
FULL SCREEN
SAMSUNG

Installing batteries



NOTES

- If the remote does not operate properly:
  - Check the polarity (+/–) of the batteries.
  - Check if the batteries are drained.
  - Check if the remote sensor is blocked by obstacles.
  - Check if there is any fluorescent lighting nearby.

! CAUTION

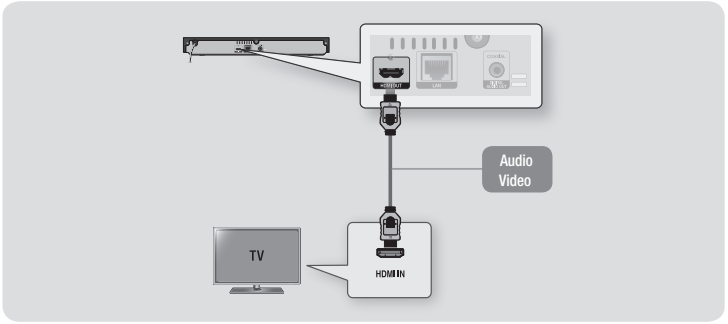
- Dispose of batteries according to local environmental regulations. Do not put them in the household trash
- Do not dispose of batteries in a fire.
- Do not short circuit, disassemble or overheat the batteries.
- Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.

Connections

Connecting to a TV

Connect an HDMI cable from the HDMI OUT jack on the back of the product to the HDMI IN jack on your TV.

- Do not connect the power cord to the wall outlet until you have made all the other connections.
- When you change the connections, turn off all devices before you start.



✎ **NOTES**

- If you use an HDMI-to-DVI cable to connect to your display device, you must also connect the Digital Audio Out on the player to an audio system to hear audio.
- An HDMI cable outputs digital video and audio, so you don't need to connect an audio cable.
- Depending on your TV, certain HDMI output resolutions may not work. Please refer to the user manual of your TV.
- When you connect the player to your TV using the HDMI cable or to a new TV, and then turn it on for the first time, the player automatically sets the HDMI output resolution to the highest supported by the TV.
- A long HDMI cable may cause screen noise. If this occurs, set HDMI Deep Colour to Off in the menu.
- To view video in the HDMI 720p, 1080i, or 1080p output mode, you must use a High speed HDMI cable.
- HDMI outputs only a pure digital signal to the TV.
  If your TV does not support HDCP (High-bandwidth Digital Content Protection), random noise appears on the screen.

Connecting to an Audio System

You can connect the Blu-ray player to an audio system using one of the methods illustrated below.

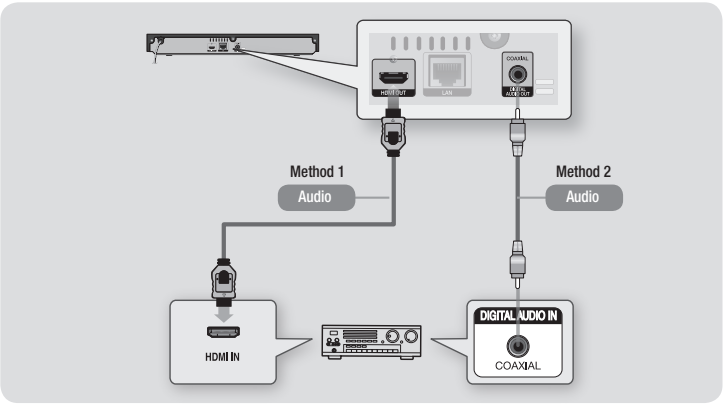
- Do not connect the power cord to the wall outlet until you have made all the other connections.
- When you change the connections, turn off all devices before you start.

Method 1 Connecting to an HDMI supported AV receiver

- Connect an HDMI cable from the HDMI OUT jack on the back of the product to the HDMI IN jack on your receiver.
- Best quality (Recommended)

Method 2 Connecting to an AV receiver with Dolby Digital or a DTS decoder

- Using a digital Coaxial cable (Not supplied), connect the Coaxial Digital Audio Out jack on the product to the Digital Coaxial In jack of the receiver.
- Good quality
- You will hear sound only through the front two speakers with Digital Output set to PCM.



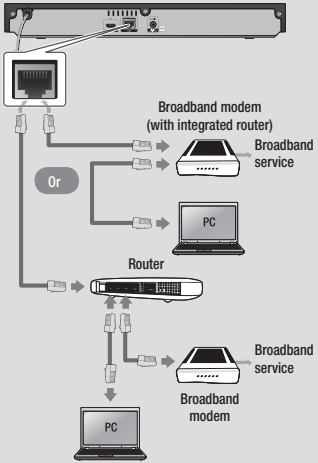
Connecting to a Network Router

You can connect your player to your network router using one of the methods illustrated below.

To use the AllShare network functionality, you must connect your PC to your network as shown in the illustrations.

The connection can be wired or wireless.

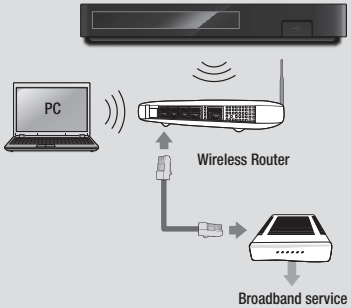
Wired Network



NOTES

- Internet access to Samsung's software update server may not be allowed, depending on the router you use or your ISP's policy. For more information, contact your ISP (Internet Service Provider).
- DSL users, please use a router to make a network connection.

Wireless Network



NOTES

- If your wireless router supports DHCP, this player can use a DHCP or static IP address to connect to the wireless network.
- Set your wireless router to Infrastructure mode. Ad-hoc mode is not supported.
- The player supports only the following wireless security key protocols:
  - WEP (OPEN/SHARED), WPA-PSK (TKIP/AES),
    WPA2-PSK (TKIP/AES)
- Select a channel on the wireless router that is not currently being used. If the channel set for the wireless router is currently being used by another device nearby, it will result in interference and communication failure.
- If you select the Pure High-throughput (Greenfield) 802.11n mode and set the Encryption type on your router to WEP, TKIP or TKIP-AES (WPS2Mixed), the player will not support a connection in compliance with new Wi-Fi certification specifications.
- Wireless LAN, by its nature, may cause interference, depending on the operating conditions (router performance, distance, obstacles, interference by other radio devices, etc).

Settings

The Initial Settings Procedure

- The Home screen will not appear if you do not configure the initial settings.
- The OSD (On Screen Display) may change in this player after you upgrade the software version.
- The access steps may differ depending on the menu you selected.
- After the initial settings process is complete, the panel buttons and remote control can be operated.

After you have connected the player to your TV, turn on the TV and player. When you turn on the player the first time, the player's Initial Settings screen appears on the TV. The Initial Setting procedure lets you set the On Screen Display (OSD) and menu languages, the aspect ratio (screen size), the network type, and connect the player to your network.

✎ NOTES

- The Home menu will not appear if you do not configure the initial settings except as noted below.
- If you press the **BLUE (D)** button during network setup, you can access the Home menu even if the network setup is not completed yet.
- When you return to the Home menu, the full screen mode is cancelled automatically.
- If you want to display the Initial Setting screen again to make changes, press the ■ button on the top panel of the player for more than 5 seconds with no disc inserted. This resets the player to its default settings.
- After the initial settings process is complete. you can operate the HDMI-CEC function.
- If you want to use the Anynet+(HDMI-CEC) function to aid in the initial set up process, please follow the instructions below.

  1) Connect the player to an Anynet+(HDMI-CEC) compliant Samsung TV using HDMI Cable.

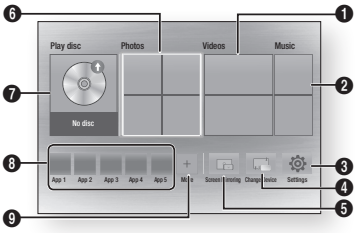
  2) Set the Anynet+(HDMI-CEC) feature to On in both the TV and the player.

  3) Set the TV to the Initial Settings Procedure.
- If you leave the player in the stop mode for more than 5 minutes without using it, a screen saver will appear on your TV. If the player is left in the screen saver mode for more than 25 minutes, the power will automatically turn off.

Menu Navigation

❶	**HOME** Button : Press to move to the Home menu.
❷	**RETURN** Button : Return to the previous menu.
❸	**(Enter) / DIRECTION** Button : Move the cursor or select an item. Activate the currently selected item. Confirm a setting.
❹	**EXIT** Button : Press to exit the current menu.

- Home Menu



❶	Selects Videos.
❷	Selects Music.
❸	Selects Settings.
❹	Selects Change Device.
❺	Selects Screen Mirroring.
❻	Selects Photos.
❼	Selects Play disc.
❽	Selects applications.
❾	Selects More applications.

✎ NOTES

- The Videos, Photos, and Music options require that you have an appropriate disc inserted into the player or a USB flash device attached to the player.

Accessing the Settings Menu

To access the Settings menu and sub-menus, follow these steps:

1. Press the **POWER** button. The Home Menu appears.
2. Press the ▲▼◄► buttons to select **Settings**, and then press the (Enter) button.
3. Press the ▲▼ buttons to select the desired submenu, and then press the (Enter) button.
4. Press the ▲▼ buttons to select the desired item, and then press the (Enter) button.
5. Press the **EXIT** button to exit the menu.

✎ NOTES

- The access steps may differ depending on the menu you selected. The OSD (On Screen Display) may change in this player after you upgrade the software version.

Display Settings

You can configure various display options such as the TV Aspect Ratio, Resolution, etc.

3D Settings

Select whether to play a Blu-ray Disc with 3D contents in 3D Mode.

✎ NOTES

- For some 3D discs, to stop a movie during 3D playback, press the ■ button once. The movie stops and the 3D mode option is de-activated. To change a 3D option selection when you are playing a 3D movie, press the ■ button once. The Blu-ray menu appears. Press the ■ button again, then select 3D Settings in the Blu-ray menu.

- Depending on the content and the position of the picture on your TV screen, you may see vertical black bars on the left side, right side, or both sides.

TV Aspect Ratio

Depending on the type of television you have, you may want to adjust the screen size setting.

✎ NOTES

- Depending on the disc type, some aspect ratios may not be available.
- If you select an aspect ratio and option which is different than the aspect ratio of your TV screen, the picture might appear to be distorted.

BD Wise (Samsung TVs only)

BD Wise is Samsung's latest inter-connectivity feature.
When you connect a Samsung player and a Samsung TV with BD Wise to each other via HDMI, and BD Wise is on in both the player and TV, the player outputs video at the video resolution and frame rate of the Blu-ray Disc/ DVDs.

✎ NOTES

- When BD Wise is on, the Resolution setting automatically defaults to BD Wise and BD Wise appears in the Resolution menu.
- If the player is connected to a device that does not support BD Wise, you cannot use the BD Wise function.
- For proper operation of BD Wise, set the BD Wise menu of both the player and the TV to **On**.

Resolution

Lets you set the output resolution of the HDMI video signal to Auto, 1080p, 1080i, 720p or 576p/480p. The number indicates the number of lines of video per frame. The i and p indicate interlaced and progressive scan, respectively. The more lines, the higher the quality.

Resolution according to the output mode

- **Blu-ray Disc/E-contents/Digital Contents playback**

Output / Setup	HDMI / connected	
	HDMI Mode	
	Blu-ray Disc	E-contents/ Digital contents
BD Wise	Resolution of Blu-ray Disc	1080p
Auto	Max. Resolution of TV input	Max. Resolution of TV input
1080p@60F (Movie Frame : Off)	1080p@60F	1080p@60F
Movie Frame : Auto (24 fps)	1080p@24F	1080p@24F
1080i	1080i	1080i
720p	720p	720p
576p/480p	576p/480p	576p/480p

- **DVD playback**

Output / Setup	HDMI / connected
	HDMI Mode
BD Wise	576i/480i
Auto	Max. Resolution of TV input
1080p	1080p
1080i	1080i
720p	720p
576p/480p	576p/480p

✎ NOTES

- If the TV you connected to the player does not support Movie Frame or the resolution you selected, the message "If no pictures are shown after selecting 'Yes', please wait for 15 seconds to return to the previous resolution. Do you want to change the resolution?" appears. If you select **Yes**, the TV's screen will go blank for 15 seconds, and then the resolution will revert to the previous resolution automatically.
- If the screen stays blank after you have changed the resolution, remove all discs, and then press and hold the ■ button on the top of the player for more than 5 seconds. All settings are restored to the factory default. Follow the steps on the previous page to access each mode and select the Display Setup that your TV will support.
- When the factory default settings are restored, all stored user BD data is deleted.
- The Blu-ray Disc must have the 24 frame feature for the player to use the Movie Frame (24 fps) mode.

Movie Frame (24 fps)

Setting the Movie Frame (24 fps) feature to Auto allows you to adjust the player's HDMI output to 24 frames per second for improved picture quality.
You can enjoy the Movie Frame (24 fps) feature only on a TV supporting this frame rate. You can select Movie Frame only when the player is in the HDMI 1080p output resolution modes.

HDMI Colour Format

Lets you set the colour space format for HDMI output to match the capabilities of the connected device (TV, monitor, etc).

HDMI Deep Colour

Lets you output video from the HDMI OUT jack with Deep Colour. Deep Colour provides more accurate colour reproduction with greater colour depth.

Progressive Mode

Lets you improve picture quality when viewing DVDs.

Audio Settings

Digital Output

Lets you select the digital audio output format that is suitable for your TV or AV Receiver. For more details, please refer to the Digital Output Selection table.

Digital Output Selection

Setup		PCM		Bitstream (Unprocessed)		Bitstream (Re-encoded DTS)	Bitstream (Re-encoded Dolby D)
Connection		HDMI Receiver	Coaxial	HDMI Receiver	Coaxial	HDMI Receiver or Coaxial	HDMI supported AV receiver or Coaxial
Audio Stream on Blu-ray Disc	PCM	Up to 7.1ch	PCM 2ch	PCM	PCM 2ch	Re-encoded DTS	Re-encoded Dolby Digital *
	Dolby Digital	PCM 2ch	PCM 2ch	Dolby Digital	Dolby Digital	Re-encoded DTS	Re-encoded Dolby Digital *
	Dolby Digital Plus	PCM 2ch	PCM 2ch	Dolby Digital Plus	Dolby Digital	Re-encoded DTS	Re-encoded Dolby Digital *
	Dolby TrueHD	PCM 2ch	PCM 2ch	Dolby TrueHD	Dolby Digital	Re-encoded DTS	Re-encoded Dolby Digital *
	DTS	PCM 2ch	PCM 2ch	DTS	DTS	Re-encoded DTS	Re-encoded Dolby Digital *
	DTS-HD High Resolution Audio	PCM 2ch	PCM 2ch	DTS-HD High Resolution Audio	DTS	Re-encoded DTS	Re-encoded Dolby Digital *
	DTS-HD Master Audio	PCM 2ch	PCM 2ch	DTS-HD Master Audio	DTS	Re-encoded DTS	Re-encoded Dolby Digital *
Audio Stream on DVD	PCM	PCM 2ch	PCM 2ch	PCM 2ch	PCM 2ch	PCM 2ch	PCM 2ch
	Dolby Digital	PCM 2ch	PCM 2ch	Dolby Digital	Dolby Digital	Dolby Digital	Dolby Digital
	DTS	PCM 2ch	PCM 2ch	DTS	DTS	DTS	DTS
Definition for Blu-ray Disc	Any	Decodes main feature audio and BONUSVIEW audio stream together into PCM audio and add Navigation Sound Effects.		Outputs only main feature audio stream so that your AV receiver can decode the audio bitstream. You will not hear BONUSVIEW audio and Navigation Sound Effects.		Decodes main feature audio and BONUSVIEW audio stream together into PCM audio and add Navigation Sound Effects, then re-encodes the PCM audio into DTS bitstream	Decodes main feature audio and BONUSVIEW audio stream together into PCM audio and add Navigation Sound Effects, then re-encodes the PCM audio into Dolby Digital bitstream

* If Source Stream is 2ch, "Re-encoded Dolby D" Settings are not applied.

Blu-ray Discs may include three audio streams :

- Main Feature Audio : The audio soundtrack of the main feature.
- BONUSVIEW audio : An additional soundtrack such as the director or actor's commentary.
- Navigation Sound Effects : When you choose a menu navigation selection, a Navigation Sound Effect may sound. Navigation Sound Effects are different on each Blu-ray Disc.

✎ **NOTES**

- Be sure to select the correct Digital Output or you will hear no sound or just loud noise.
- If the HDMI device (AV receiver, TV) is not compatible with compressed formats (Dolby Digital, DTS), the audio signal outputs as PCM.
- Regular DVDs do not have BONUSVIEW audio and Navigation Sound Effects.
- Some Blu-ray Discs do not have BONUSVIEW audio and Navigation Sound Effects.
- If you play MPEG audio soundtracks, the audio signal outputs as PCM regardless of your Digital Output selections (PCM or Bitstream).
- If your TV is not compatible with compressed multi-channel formats (Dolby Digital, DTS), the player may output PCM 2ch downmixed audio even though you selected Bitstream (either Re-encoded or Unprocessed) in the setup menu.
- If your TV is not compatible with PCM sampling rates over 48kHz, the player may output 48kHz downsampled PCM audio even though you set PCM Downsampling to **Off**.

PCM Downsampling

Lets you choose to have 96KHz PCM signals downsampled to 48KHz before they are outputted to an amplifier. Choose **On** if your amplifier or receiver is not compatible with a 96KHz signal.

Dynamic Range Control

Lets you apply dynamic range control to Dolby Digital, Dolby Digital Plus, and Dolby True HD audio.

- **Auto** : Automatically controls the dynamic range of Dolby TrueHD audio, based on information in the Dolby TrueHD soundtrack.
  Also turns dynamic range control on for Dolby Digital and Dolby Digital Plus.
- **Off** : Leaves the dynamic range uncompressed, letting you hear the original sound.
- **On** : Turns dynamic range control on for all three Dolby formats. Quieter sounds are made louder and the volume of loud sounds is reduced.

Downmixing Mode

Lets you select the multi-channel downmix method that is compatible with your stereo system. You can choose to have the player downmix to normal stereo or to surround compatible stereo.

Network Settings

To begin setting up the network connection for your player, follow these steps:

1. In the Home menu, press the ▲▼◄► buttons to select **Settings**, and then press the ↵ button.
2. Press the ▲▼ buttons to select **Network**, and then press the ↵ button.
3. Press the ▲▼ buttons to select **Network Settings**, and then press the ↵ button.
4. Press the ▲▼ buttons to select **Network Type**, and then press the ↵ button.
5. Press the ▲▼ buttons to select **Wired** or **Wireless**, and then press the ↵ button.
6. Go to the next section.

Configuring Your Network Connection

Before you begin, contact your ISP to find out if your IP address is static or dynamic. If it is dynamic, and you have a wired or wireless network, we recommend using the Automatic configuration procedures described below.

If you are connecting to a wired network, connect the player to your router using a LAN cable before you start the configuration procedure.

If you are connecting to a wireless network, disconnect any wired network connection before you begin.

To begin configuring your network connection, follow these steps:

Wired Network

❑ Wired - Automatic

1. In the Home screen, select **Settings**, and then press the ↵ button.
2. Select **Network**, and then press the ↵ button.
3. Select **Network Settings**, and then press the ↵ button.
4. Select **Wired** in the Network Settings screen, and then press the ↵ button.
5. Select **Connect** button, and then press the ↵ button. The product detects the wired connection, verifies the network connection and then connects to the network.

❑ Wired - Manual

If you have a static IP address or the Automatic procedure does not work, you'll need to set the Network Settings values manually.

Follow Steps 1 and 2 in Wired - Automatic, and then follow these steps:

1. Select **Network Status**. The player searches for a network, and then displays the connection failed message.
2. On the bottom of the screen, select **IP Settings**, and then press the ↵ button. The IP Settings screen appears.
3. Select the IP Setting field, and then press the ↵ button.
4. Select **Enter manually** in the IP Setting field, and then press the ↵ button.
5. Select a value to enter (**IP Address**, for example), and then press the ↵ button. Use the number keypad on your remote control to enter the numbers for the value. Use the ◄► buttons on the remote control to move from entry field to entry field within a value. When done with one value, press the ↵ button.
6. Press the ▲ or ▼ button to move to another value, and then enter the numbers for that value following the instructions in Step 5.
7. Repeat Steps 5 and 6 until you have filled in all values.

✎ **NOTES**

- You can get the Network values from your Internet provider.

8. When finished entering all the values, and then press the **RETURN** or **EXIT** buttons. The player verifies the network connection and then connects to the network.

Wireless Network

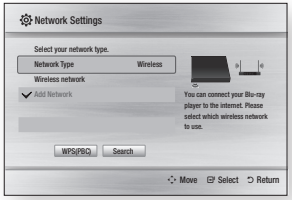
You can setup a wireless network connection in four ways:

- Wireless Automatic
- Wireless Manual
- WPS(PBC)
- WPS(PIN)

When you configure the wireless network connection, any wireless network devices currently connected through the player or, if applicable, the player's current wired connection, will be disconnected.

❑ Wireless - Automatic

1. In the Home screen, select **Settings**, and then press the ↵ button.
2. Select **Network**, and then press the ↵ button.
3. Select **Network Settings**, and then press the ↵ button.
4. Select **Wireless** in the Network Settings screen, and then press the ↵ button. The player searches for and then displays a list of the available networks.



5. Select the desired network, and then press the ↵ button.
6. On the Security screen, enter your network's Security Code or Pass Phrase. Enter numbers directly using the number buttons on your remote control. Enter letters by selecting a letter with an arrow button, and then pressing ↵ button.
7. When done, select **Done** and then press the ↵ button. The player verifies the network connection and then connects to the network.
8. When verification is complete, select **OK**, and then press the ↵ button.

✎ **NOTES**

- You should be able to find the Security Code or Pass Phrase on one of the set up screens you used to set up your router or modem.

❑ **Wireless - Manual**

If you have a static IP address or the Automatic procedure does not work, you'll need to set the Network Settings values manually.

1. Follow the directions in Wireless - Automatic through Step 5.
2. The player searches for a network, and then displays the connection failed message.
3. On the bottom of the screen, select **IP Settings**, and then press the ⏎ button. The IP Settings screen appears.
4. Select the IP Setting field, and then press the ⏎ button.
5. Select **Enter manually** in the IP Setting field, and then press the ⏎ button.
6. Select a value to enter (**IP Address**, for example), and then press ⏎ button. Use the number keypad on your remote control to enter the numbers for the value. Use the ◄► buttons on the remote control to move from entry field to entry field within a value. When done with one value, press the ⏎ button.
7. Press the ▲ or ▼ button to move to another value, and then enter the numbers for that value following the instructions in Step 6.
8. Repeat Steps 6 and 7 until you have filled in all values.

✎ **NOTES**

- You can get the Network values from your Internet provider.

9. When finished, and then press the **RETURN** or **EXIT** button. The Security Screen appears.
10. On the Security screen, enter your network's Security Code or Pass Phrase. Enter numbers directly using the number buttons on your remote control. Enter letters by selecting a letter with the ▲▼◄► buttons, and then pressing the ⏎ button.
11. When finished, select **Done** at the right of the screen, and then press the ⏎ button. The player verifies the network connection and then connects to the network.
12. After the player verifies the network, select **OK**, and then press the ⏎ button.

❑ **WPS(PBC)**

1. In the Home screen, select **Settings**, and then press the ⏎ button.
2. Select **Network**, and then press the ⏎ button.
3. Select **Network Settings**, and then press the ⏎ button.
4. Select **Wireless** in the Network Settings screen, and then press the ⏎ button.
5. Press the ▲▼ button on your remote, and then press the ◄► button to select the **WPS(PBC)**.
6. Press the ⏎ button on your remote. The "Press the PBC button" message appears.
7. Press the WPS(PBC) button on your router within two minutes. Your player automatically acquires all the network settings values it needs and connects to your network. The Network Status screen appears. The player connects to the network after the network connection is verified.

❑ **WPS(PIN)**

Before you begin, open the router's setup menu on your PC and access the screen with the WPS PIN entry field.

1. In the Home screen, select **Settings**, and then press the ⏎ button.
2. Select **Network**, and then press the ⏎ button.
3. Select **Network Settings**, and then press the ⏎ button.
4. Select **Wireless** in the Network Settings screen, and then press the ⏎ button. The player searches for and then displays a list of the available networks.
5. Select the desired network, and then press the ► button.
6. Select the **WPS(PIN)**, and then press the ⏎ button. The PIN pop-up appears.
7. Enter the PIN into the WPS PIN entry field in the router's Set Up screen and then save the the screen.

✎ **NOTES**

- Contact the manufacturer of the router for instructions explaining how to access the route's Set Up screens or refer to the router's user's manual.
- For WPS connection, set your wireless router's security encryption to AES. Setting to WEP security encryption does not support WPS connection.

Network Test

Use this menu item to check whether your network connection is working or not.

Network Status

Use to check whether a connection to a network and the Internet has been established.

Wi-Fi Direct

The Wi-Fi Direct function allows you to connect Wi-Fi Direct devices to the player and each other using a peer-to-peer network, without a wireless router.

✎ **NOTES**

- Some Wi-Fi Direct devices may not support the AllShare function if connected via Wi-Fi Direct. If this is the case, it is advisable to change the network connection method between devices.
- Bluetooth transmissions can interfere with the Wi-Fi Direct signal. Before you use the Wi-Fi Direct function, we strongly recommend that you turn off the Bluetooth function of any active mobile device.

1. Turn on the Wi-Fi direct device and activate its Wi-Fi Direct function.
2. In the Home screen, select **Settings**, and then press the ⏎ button.
3. Select **Network**, and then press the ⏎ button.
4. Select **Wi-Fi Direct**, and then press the ⏎ button. The Wi-Fi Direct devices that you can connect appear.

5. You have three ways to complete the Wi-Fi connection:
   - Through the Wi-Fi device.
   - Through the player using PBC.
   - Through the player using a PIN.

   Each is covered below.

Through the Wi-Fi Device

1. On the Wi-Fi device, follow the procedure on the device for connecting to another Wi-Fi Direct device. See the device's user manual for instructions.
2. When you have completed the procedure, you should see a pop-up on your TV screen saying that a device that supports Wi-Fi Direct has requested to connect. Select **OK**, and then press the button to accept.
3. The Connecting pop-up appears, followed by the Connected pop-up. When it closes, you should see the device listed on the Wi-Fi Direct screen as connected.

Through the Player Using PBC

1. Select the Wi-Fi Direct device you want to connect to this player, and then press the button. The PBC/PIN pop up appears.
2. Select **PBC**, and then press the button. The PBC pop-up appears.
3. Press the PBC button on the Wi-Fi Direct device within 2 minutes.
4. The Connecting pop-up appears, followed by the Connected pop-up. When it closes, you should see the device listed on the Wi-Fi Direct screen as connected.

Through the Player Using a PIN

1. Select the Wi-Fi Direct device you want to connect to this player, and then press the button. The PBC/PIN pop up appears.
2. Select **PIN**, and then press the button. The PIN pop-up appears.
3. Note the PIN code in the pop-up, and then enter it into the appropriate field in the Wi-Fi Direct device you want to connect.
4. The Connecting pop-up appears, followed by the Connected pop-up. When it closes, you should see the device listed on the Wi-Fi Direct screen as connected.

✎ **NOTES**

- The current wired or wireless network connection will be disconnected when you use the Wi-Fi Direct function.
- Text files, such as files with a .TXT or .DOC extension, will not display when you are using the Wi-Fi Direct function.

Screen Mirroring

The Screen Mirroring function lets you view the screen of your smart phone or android tablet on the TV you have connected to the Blu-ray player.

1. In the Home menu, press the ▲▼◄► buttons to select **Screen Mirroring,** and then press the button. The Screen Mirroring pop-up appears.
2. Launch AllShare Cast on your device.
3. On your device, find the name of the Blu-ray player in the list of available devices and then select it.
4. The TV will display a PIN. Enter the PIN into your device.
5. The TV displays a connecting message (for example, Connecting to Android_92gb...) and then displays the connected message.
6. In a few moments, the screen of your device appears on the TV screen.
7. To stop Screen Mirroring, press the **EXIT** or **RETURN** button on the remote control, or disable Screen Mirroring function of your smart phone.

✎ **NOTES**

- You can connect to a device that supports AllShare Cast. Note that connecting to such a device may not be fully supported depending on the manufacturer. For further information on mobile connection support, refer to the manufacturer's web site.
- When you are using the Screen Mirroring function, video stuttering or audio dropouts may occur, depending on your environment.
- Bluetooth transmissions can interfere with the Screen Mirroring signal. Before using the Screen Mirroring function, we strongly recommend that you turn off the Bluetooth function on your smart phone or smart device (tablet, etc.).

Device Name

Device Name function allows you to change player's name by selecting from device name list box.

BD-Live Internet Connection

Set to allow or prohibit an Internet connection when you use the BD-LIVE service.

- **Allow (All)** : The Internet connection is allowed for all BD-LIVE contents.
- **Allow (Valid Only)** : The Internet connection is allowed only for BD-LIVE contents containing a valid certificate.
- **Prohibit** : No Internet connection is allowed for any BD-LIVE content.

✎ **NOTES**

- **What is a valid certificate?**
  When the player uses BD-LIVE to send the disc data and a request to the server to certify the disc, the server uses the transmitted data to check if the disc is valid and sends the certificate back to the player.
- The Internet connection may be restricted while you are using BD-LIVE contents.

Using BD-LIVE™

Once the player is connected to the network, you can enjoy various movie-related service contents using a BD-LIVE compliant disc.

1. Attach a USB memory stick to the USB jack on the front of the player, and then check its remaining memory. The memory device must have at least 1GB of free space to accommodate the BD-LIVE services.
2. Insert a Blu-ray Disc that supports BD-LIVE.
3. Select an item from various BD-LIVE service contents provided by the disc manufacturer.

✎ **NOTES**

- The way you use BD-LIVE and the provided contents may differ, depending on the disc manufacturer.

The AllShare Function

AllShare lets you play music, video, and photo files located in your PC or NAS on the player.

To use AllShare with your player, you must connect the player to your network.
(See page 13-16).
To use AllShare with your PC, you must install AllShare software on your PC.

If you have NAS, you can use AllShare without any additional software.

To download AllShare software

1. Go to Samsung.com
2. Click Support, enter your player's product number in the field that appears, and then click Product.
3. On the next screen, click Get downloads under Downloads.
4. Click Software on the next page.
5. Click the icon in the AllShare line under File to start the download.

System Settings

Initial Settings

By using the Initial Settings function, you can set the language, Network Settings, etc.
For more information about the Initial Settings function, refer to the Initial Settings section of this user manual (See page 10).

Quick Start

You can turn on the power quickly by decreasing the boot time.

✎ NOTES

- If this function is set to **On**, Standby power consumption will be increased.

Anynet+ (HDMI-CEC)

Anynet+ is a convenient function that offers linked operations with other Samsung players that have the Anynet+ feature.
To operate this function, connect this player to an Anynet+ Samsung TV with an HDMI cable. With Anynet+ on, you can operate this player using a Samsung TV remote control and start disc playback simply by pressing the **PLAY** (▶) button on the TV's remote control.
For more information, please see the TV user manual.

✎ NOTES

- This function is not available if the HDMI cable does not support CEC.
- If your Samsung TV has an Anynet+ logo, then it supports the Anynet+ function.
- Depending on your TV, certain HDMI output resolutions may not work.
  Please refer to the user manual of your TV.
- After the product was turned off, disconnecting and connecting the power cable turns it on automatically. At the moment, it automatically turns off in about 15 seconds for re-establishing Anynet+ connection.
- For some TV products, if connected to this product with Anynet+ function, turning the TV on may display a warning popup message saying no connection was found. Still, Anynet+ connection is properly established and available to use.

BD Data Management

Enables you to manage the downloaded contents you accessed through a Blu-ray disc that supports the BD-LIVE service and stored on a flash drive.
You can check the device's information including the storage size, delete the BD data, or change the Flash memory device.

✎ NOTES

- In the external memory mode, disc playback may be stopped if you disconnect the USB device in the middle of playback.
- Your player supports the FAT16, FAT32, and NTFS file systems. We recommend you use USB devices that support USB 2.0 protocol with 4 MB/sec or faster read/write speed.
- The Resume Play function may not work after you format the storage device.
- The total memory available to BD Data Management may differ, depending on the conditions.

DivX® Video On Demand

View DivX® VOD Registration Codes to purchase and play DivX® VOD contents.

Language Settings

You can select the language you prefer for the On-Screen menu, disc menu, audio, and subtitles.

✎ NOTES

- The selected language will only appear if it is supported on the disc.

Security Settings

The default security PIN is 0000. Enter the default PIN to access the security function if you haven't created your own PIN. After you have accessed the security function for the first time, change the PIN using the Change PIN function.

BD Parental Rating

Prevents playback of Blu-ray Discs with specific age ratings unless the 4 digit PIN is entered.

DVD Parental Rating

This function works in conjunction with DVDs that have been assigned an age rating or numeric rating that indicates the maturity level of the content. These numbers help you control the types of DVDs that your family can watch.

Select the rating level you want to set.
For example, if you select Level 6, discs rated above 6 - Level 7 and 8 - will not play.

A larger number indicates more mature content.

Change PIN

Change the 4-digit password used to access security functions.

If you forget your password

1. Remove any discs.
2. Press and hold the ■ button on the top panel for 5 seconds or more.
   All settings will revert to the factory settings.

✎ NOTES

- When the factory default settings are restored, all the user stored BD data will be deleted.

General Settings

Time Zone

Lets you specify the time zone that is applicable to your area.

Support Settings

Software Upgrade

The Software Upgrade menu allows you to upgrade the player's software for performance improvements or additional services.

By Online

To upgrade By Online, follow these steps:

1. In the player's menu, go to **Settings** > **Support** > **Software Upgrade**.
2. Select **By Online**, and then press the button. The Connecting to Server message appears.
3. A popup message will appear if an update is available.
4. If you select **Yes**, download process started. (Never turn the player on during an upgrade.)
5. When the update is completed, the player will restart automatically.

✎ NOTES

- The upgrade is complete when the player turns off, and then turns on again by itself.
- Never turn the player off or back on manually during the update process.
- Samsung Electronics takes no legal responsibility for player malfunction caused by an unstable Internet connection or consumer negligence during a software upgrade.
- No disc should be in the product when you upgrade the software By Online.

By USB

To upgrade by USB, follow these steps:

1. Visit www.samsung.com/bluraysupport.
2. Download the latest USB software upgrade zip archive to your computer.
3. Unzip the zip archive to your computer. You should have a single RUF file with the same name as the zip file.
4. Copy the RUF file to a USB flash drive.
5. Make sure there is no disc in the player, and then insert the USB flash drive into the USB port of the player.
6. In the player's menu, go to **Settings** > **Support** > **Software Upgrade**.
7. Select **By USB**.

✎ NOTES

- No disc should be in the product when you upgrade the software using the USB Host jack.
- When the software upgrade is done, check the software details in the software Upgrade menu.
- Do not turn off the player during the software upgrade. It may cause the player to malfunction.
- Software upgrades using the USB Host jack must be performed with a USB flash memory stick only.

Auto Upgrade Notification

If you have connected the player to your network, and then set Auto Upgrade Notification on, the player automatically notifies you when a new software version is available for the player.

To set Auto Upgrade Notification on, follow these steps:

1. Select **Auto Upgrade Notification**, and then press the button.
2. Use the ▲▼ buttons to select **On**, and then press the button.

If there is a new software version available, the player notifies you with a popup message.

1. To upgrade the firmware, select **Yes** in the Pop-up. The player turns off automatically, then restarts, and begins the download. (Never turn the player on or off manually during an upgrade.)
2. The update progress popup appears.
3. When the update is completed, the player will restart automatically.

✎ NOTES

- The upgrade is complete when the player turns off, and then turns on again by itself.
- Never turn the player off or on manually during the update process.
- Samsung Electronics takes no legal responsibility for player malfunction caused by an unstable Internet connection or consumer negligence during software upgrade.

Contact Samsung

Provides contact information for assistance with your player.

Terms of Service Agreement

Lets you view the general disclaimer regarding third party contents and services.

Reset

Returns all settings to their factory defaults except for the network settings.

Media Play

Playing a Commercially Recorded Disc

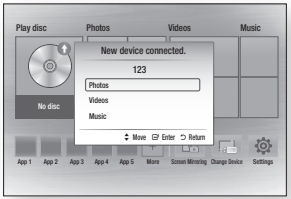
1. Press the ⏏ button to open the disc tray.
2. Place a disc gently into the disc tray with the disc's label facing up.
3. Press the ⏏ button to close the disc tray. Playback starts automatically.

Playing Files on a USB Device

There are two methods you can use to play or view multimedia files located on a USB device through your player.

Method 1

1. Turn the player on.
2. Connect the USB device to the USB port on the front panel of the player. The New Device Connected pop-up appears.



✎ NOTES

- If the pop-up does not appear, go to Method 2.

3. Use the ▲▼ buttons to select **Photos**, **Videos** or **Music**, and then press the ↵ button. The Photos, Videos & Music screen appears listing the content of the device. Depending on how the contents is arranged, you will see either folders, individual files, or both.

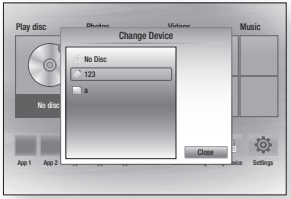
✎ NOTES

- Even though the player will display folders for all content types, it will only display files of the Content Type you selected in Step 3. For example, if you selected music, you will only be able to see music files. You can change this selection by returning to the Photos, Videos & Music screen and going to Step 3 in Method 2 below.

4. If necessary, use the ▲▼◄► buttons to select a folder, and then press the ↵ button.
5. Select a file to view or play, and then press the ↵ button.
6. Press the **RETURN** button to exit a folder or the **EXIT** button to return to the Home screen.
7. Go to pages 19~21 for instructions that explain how to control playback of videos, music, and pictures on a USB device.

Method 2

1. Turn the player on.
2. Connect the USB device to the USB port on the front panel of the player. Select **Change Device** and then press the ▲▼ button to select **USB**. Press the ↵ button.



3. Use the ▲▼◄► buttons to select **Photos**, **Videos** or **Music** on the Home screen, and then press the ↵ button. The Photos, Videos & Music screen appears listing the content of the device. Depending on how the contents is arranged, you will see either folders, individual files, or both.

✎ NOTES

- Even though the player will display folders for all content types, it will only display files of the Content Type you selected in Step 3. For example, if you selected music, you will only be able to see music files. You can change this selection by returning to the Photos, Videos & Music screen and repeating Step 3.

4. If necessary, use the ▲▼◄► buttons to select a folder, and then press the ↵ button.
5. Use the ▲▼◄► buttons to select a file to view or play, and then press the ↵ button.
6. Press the **RETURN** button to exit a folder or the **EXIT** button to return to Home screen.
7. Go to pages 19~21 for instructions that explain how to control playback of videos, music, and pictures on a USB device.

✎ NOTES

- If you insert a disc when playing a USB device, the device mode changes to "Disc" automatically.

Playing a Disc with User Recorded Content

You can play multimedia files you have recorded on Blu-ray, DVD, or CD discs.

1. Place a user recorded disc into the disc tray with the disc's label facing up, and then close the tray.
2. Use the ◄► buttons to select the type of content you want to view or play - **Videos**, **Photos**, or **Music** - and then press the ↵ button.

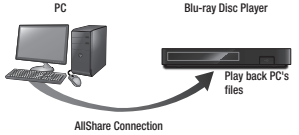
✎ NOTES

- Even though the player will display folders for all content types, it will only display files of the Content Type you selected in Step 2. For example, if you selected music, you will only be able to see music files. You can change this selection by returning to the Home screen and repeating Step 2.

3. A screen appears listing the contents of the disc. Depending on how the contents are arranged, you will see either folders, individual files, or both.
4. If necessary, use the ▲▼◄►buttons to select a folder, and then press the ↵ button.
5. Use the ◄►▲▼ buttons to select a file to view or play, and then press the ↵ button.

6. Press the **RETURN** button one or more times to exit a current screen, exit a folder, or to return to the Home screen. Press the **EXIT** button to return directly to the Home Screen.
7. Go to pages 19~21 for instructions that explain how to control playback of videos, music, and pictures on a disc.

Playing Content Located on Your PC or AllShare Device through the Blu-ray Disc Player



1. Connect the Blu-ray Disc Player, your PC, and/or your AllShare compatible device to the same wireless network.
2. Follow the directions in the AllShare software Installation/Instruction manual to set up devices and files for playing or viewing.
3. Select **Change Device** on the player's Home screen, and then press the ⏎ button. In the list of AllShare connected devices that appears, select your PC or other AllShare compatible device, and then press the ⏎ button.
4. Use the ◄► buttons to select the type of content you want to view or play - **Videos**, **Photos**, or **Music** - and then press the ⏎ button.

✎ NOTES

- Even though the player will display folders for all content types, it will only display files of the Content Type you selected in Step 4. For example, if you selected music, you will only be able to see music files. You can change this selection by returning to the Home screen and repeating Step 4.

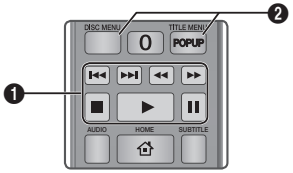
5. A screen appears listing the contents of the disc. Depending on how the contents are arranged, you will see either folders, individual files, or both.
6. If necessary, use the ▲▼◄►buttons to select a folder, and then press the ⏎ button.
7. Use the ◄►▲▼ buttons to select a file to view or play, and then press the ⏎ button.
8. Press the **RETURN** button one or more times to exit a current screen, exit a folder, or to return to the Home screen. Press the **EXIT** button to return directly to the Home Screen.
9. Go to pages 19~21 for instructions that explain how to control playback of videos, music, and pictures on a disc.

Controlling Video Playback

You can control the playback of video content located on a Blu-ray disc, DVD, CD, USB device, or your computer. Depending on the media, some of the functions described in this manual may not be available.

During Blu-ray or DVD disc playback, the Full screen button does not operate.

Buttons on the Remote Control used for Video Playback



1 Playback related buttons

The player does not play sound in Search, Slow or Step mode.

- To return to normal speed playback, press the ▶ button.

▶ button	Starts playback.
■ button	Stops playback.
❚❚ button	Pauses playback.
Fast Motion Play	During playback, press the ◀◀ or ▶▶ button. Each time you press the ◀◀ or ▶▶ button, the playback speed will change.
Slow Motion Play	In pause mode, press the ▶▶ button. Each time you press the ▶▶ button, the playback speed will change.
Step Motion Play	In pause mode, press the ❚❚ button. Each time you press the ❚❚ button, a new frame appears.
Skip Motion Play	During playback, press the ⏮ or ⏭ button. Each time you press the ⏮ or ⏭ button, the disc moves to the previous or next chapter or file.

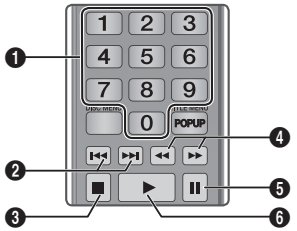
2 Using the disc menu, title menu, popup menu, and title list

DISC MENU button	During playback, press this button to start the disc menu function.
TITLE MENU button	During playback, press this button to start the title menu function.
POPUP MENU button	During playback, press this button to start the popup menu function.

Controlling Music Playback

You can control the playback of music located on a Blu-ray disc, DVD, CD, USB device, or your computer.

Buttons on the Remote Control used for Music Playback



❶	**NUMBER** buttons **(Audio CD (CD-DA) only)** : During Playlist playback, press the desired track number. The selected track is played.
❷	**Skip** : During playback, press the ⏮ or ⏭ button to move to the previous or next file of the playlist.
❸	■ button : Stops a track.

❹	**Fast Play (Audio CD (CD-DA) only)** During playback, press the ◀◀ or ▶▶ button. Each time you press the ◀◀ or ▶▶ button, the playback speed will change.
❺	**Pause** : Pauses a track.
❻	▶ button : Plays the currently selected track.

Repeat an Audio CD (CD-DA)/ MP3

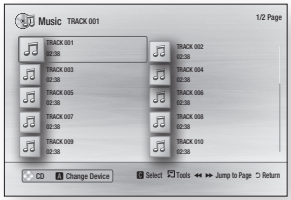
1. During Playlist playback, press the **TOOLS** button.

2. Press the ◄► buttons to select **Track**, **All**, **Shuffle**, or **Off**.
3. Press the ↵ button.

Off	Songs are played in the order in which they were recorded.
(↻) **Track**	The current song is repeated.
(↻) **All**	All songs are repeated.
(⤮) **Shuffle**	Shuffle plays songs in random order.

Playlist

1. To move to the Music List, press the ■ or **RETURN** button.
   The Music List screen appears.



2. Press the ▲▼◄► buttons to move to a desired track, and then press the **YELLOW (C)** button. A check appears on the track.
   Repeat this procedure to select additional tracks.
3. To remove a track from the list, move to the track, and then press the **YELLOW (C)** button again.
   The check on the track is cancelled.
4. When done, press the ↵ button.
   The tracks you selected are displayed on the right side of the screen. The player plays the first track.
5. To change the play list, press the ■ button or **RETURN** button to return to the Music List. Repeat Steps 2, 3, and 4.
6. To cancel the play list and return to the Home screen, press the **RETURN** or **EXIT** button.

✎ **NOTES**

- You can create a playlist with up to 99 tracks on Audio CDs (CD-DA).
- If you remove all the tracks from a play list and then press the ↵ button, the player lists and plays all the tracks on the disc.

Ripping

Lets you copy audio files contents from data Disc to USB/HDD device.

1. Open the disc tray. Place the audio (CDDA) disc on the tray, and close the tray. Insert a USB device into the USB jack on the front of the product.
2. In Stop mode, press the ▲▼◄► buttons to move to a desired track, and then press the **YELLOW (C)** button. A check appears on the track.
   Repeat this procedure to select additional tracks.
3. To remove a track from the list, move to the track, and then press the **YELLOW (C)** button again.
   The check on the track is cancelled.
4. When done, press the **TOOLS** button and then select the **Rip** using the ▲▼ buttons. and then press the ↵ button. The Rip pop-up appears.
5. Use the ▲▼ buttons to select the device to store the ripped files, and then press the ↵ button.

✎ **NOTES**

- Do not disconnect the device while ripping is in progress.

6. If you want to cancel ripping, press the ↵ button and then select **Yes**. Select **No** to continue ripping.
7. When ripping is complete, the "Ripping completed." message appears. Press the ↵ button to go back to the Playback screen.

✎ **NOTES**

- This function may not be supported by some discs.
- On the Ripping screen, you can also choose **Select All** and **Deselect All**.
  - Use **Select All** to select all tracks. This cancels your individual track selections.
  - Use **Deselect All** to deselect all selected tracks at once.

Disc Copy to USB

Lets you copy video/photo/music contents from data Disc to USB/HDD device.

1. Open the disc tray. Place the data disc on the tray, and close the tray. Insert a USB device into the USB jack on the front of the product. The new device pop-up appears.
2. Press the ▲ button, and then press the ◄► buttons to select Blu-ray, DVD or CD.
3. Use the ▲▼ buttons to select **Photos**, **Videos** or **Music**, and then press the ↵ button. The Photos, Videos & Music screen appears listing the content of the device. Depending on how the contents is arranged, you will see either folders, individual files, or both.

✎ **NOTES**

- Even though the player will display folders for all content types, it will only display files of the Content Type you selected in Step 3. For example, if you selected music, you will only be able to see music files. You can change this selection by returning to the Photos, Videos & Music screen and repeating Step 3.

4. With the Playback screen displayed, use the ▲▼◄► buttons to select the **Videos**, **Photos**, or **Music**, and then press the **YELLOW (C)** button. A check appears to the left of the desired item.

5. Repeat Step 4 to select and check additional desired item.
6. To remove the desired item from the list, press the **YELLOW (C)** again.
   The check on the desired item is removed.
7. When done, press the **TOOLS** button and then select the **Copy to USB** using the ▲▼ buttons. and then press the ⏎ button. The Copy to USB pop-up appears.
8. Use the ▲▼ buttons to select the device to store the copied files, and then press the ⏎ button.

✎ NOTES

- Do not disconnect the device while copying is in progress.

9. If you want to cancel copying, press the ⏎ button and then select **Yes**. Select **No** to continue copying.
10. When copying is complete, the "Copying completed." message appears. Press the ⏎ button to go back to the Playback screen.

✎ NOTES

- This function may not be supported by some discs.
- On the Copying screen, you can also choose **Select All** and **Deselect All**.
  - Use **Select All** to select all item. This cancels your individual item selections.
  - Use **Deselect all** to deselect all selected item at once.

Playing Photo Contents

You can control the playback of photo content located on a Blu-ray disc, DVD, CD, USB device, or your computer.

Using the Tools Menu

During playback, press the **TOOLS** button.

Start Slide Show/ Stop Slide Show	Select to start or stop the slide show.
Slide Show Speed	Select to set a slide show's speed.
Background Music	Select to listen to music while viewing a slide show.
Zoom	Select to enlarge the current picture. (Enlarge up to 4 times)
Rotate	Select to rotate the picture. (This will rotate the picture either clockwise or counter clockwise.)
Information	Shows the picture information.

✎ NOTES

- Depending on the disc or storage device, the Tools menu may differ.
- To enable the background music function, the photo file must be in the same storage media as the music file.
  However, the sound quality can be affected by the bit rate of the MP3 file, the size of the photo, and the encoding method.
- You can't enlarge the subtitle and PG graphic in the full screen mode.

Appendix

Troubleshooting

Before requesting service, please try the following solutions.

PROBLEM	SOLUTION
No operation can be performed with the remote control.	• Check the batteries in the remote control. They may need replacing. • Operate the remote control at a distance of no more than 6.1m from the player. • Remove batteries and hold down one or more buttons for several minutes to drain the microprocessor inside the remote control to reset it. Reinstall batteries and try to operate the remote control again.
Disc does not play.	• Ensure that the disc is installed with the label side facing up. • Check the region number of the Blu-ray Disc/DVD.
Disc Menu does not appear.	• Ensure that the disc has disc menus.
The prohibition message appears on the screen.	• This message appears when an invalid button is pressed. • The Blu-ray Disc/DVD's software doesn't support the feature (e.g., angles). • You've requested a title or chapter number or search time that is out of range.
Play mode differs from the Setup Menu selection.	• Some of the functions selected in the Setup Menu may not work properly if the disc is not encoded with the corresponding function.
The screen ratio cannot be changed.	• The Screen Ratio is fixed on your Blu-ray Disc/DVD. • This is not a problem with the player.
No audio.	• Make sure you have selected the correct Digital Output in the Audio Options Menu.
The screen is blank.	• If the HDMI output is set to a resolution your TV cannot support (for example, 1080p), you may not see a picture on your TV. • Press the ■ button (on top panel) for more than 5 seconds with no disc inside. All settings will revert to the factory settings. • When the factory default settings are restored, all stored user BD data is deleted.

PROBLEM	SOLUTION
Forgot password	• Press the ■ button (on top panel) for more than 5 seconds with no disc inside. All settings including the password will revert to the factory settings. Don't use this unless absolutely necessary. • When the factory default settings are restored, all stored user BD data is deleted.
The picture is noisy or distorted	• Make sure that the disc is not dirty or scratched. • Clean the disc.
No HDMI output.	• Check the connection between the TV and the HDMI jack of the player. • Check if your TV supports 576p/480p, 720p, 1080i, or 1080p HDMI input resolutions.
Abnormal HDMI output screen.	• If random noise appears on the screen, it means that TV does not support HDCP (High-bandwidth Digital Content Protection).
If you experience other problems.	• Go to the contents and find the section of the user manual that contains the explanations regarding the current problem, and follow the procedure once again. • If the problem still cannot be solved, please contact your nearest Samsung authorised service centre.
AllShare function	
I can see folders shared through AllShare, but I cannot see the files.	• AllShares shows only files corresponding to the Image, Music, and Movie categories. Files that do not correspond to these categories are not displayed.
Video is played intermittently.	• Check if the network is stable. • Check if the network cable is properly connected and if the network is overloaded. • The wireless connection between the AllShare compatible device and the player is unstable. Check the connection.
AllShare connection between Player and PC is unstable.	• The IP address under the same subnetwork should be unique. If they are not, IP interference can cause this phenomenon. • Check if you have a firewall enabled. If so, disable the firewall function.
BD-LIVE	
I cannot connect to the BD-LIVE server.	• Check whether the network connection is working or not by using the Network Status menu. • Check whether the USB memory device is connected to the player. • The memory device must have at least 1GB of free space to accommodate the BD-LIVE service. You can check the available size in BD Data Management. • Check whether the BD-LIVE Internet Connection menu is set to Allow(All). • If all above fails, contact the contents provider or update the player to the latest firmware.
When using the BD-LIVE service, an error occurs.	• The memory device must have at least 1GB of free space to accommodate the BD-LIVE service. You can check the available size in BD Data Management.

✎ **NOTES**

- When the factory default settings are restored, all stored user BD data is deleted.

Repairs

If you contact us to repair your player, an administration fee may be charged if either:

1. An engineer is called out to your home at your request and there is no defect in the product.
2. You bring the unit to a repair centre and there is no defect in the product.

We will provide you with the amount of the administration fee before we make a home visit or begin any work on your player.
We recommend you read this manually thoroughly, search for a solution on line at www.samsung.com, or contact Samsung Customer Care before seeking to repair your player.

Specifications

General	Weight	1.2 Kg
	Dimensions	360 (W) X 196 (D) X 39 (H) mm
	Operating Temperature Range	+5°C to +35°C
	Operating Humidity Range	10 % to 75 %
USB	Type A	USB 2.0
	DC output	5V 0.5A Max.
HDMI	Video	2D : 1080p, 1080i, 720p, 576p/480p 3D : 1080p, 720p
	Audio	PCM, Bitstream
Audio Output	Digital Audio Output	Coaxial
Network	Ethernet	100BASE - TX Terminal
	Wireless LAN	Built-In
	Security	WEP (OPEN/SHARED) WPA-PSK (TKIP/AES) WPA2-PSK (TKIP/AES)
	WPS(PBC)	Supported

- Network speeds equal to or below 10Mbps are not supported.
- Design and specifications are subject to change without prior notice.
- For the power supply and power consumption, refer to the label attached to the player.
- Weight and dimensions are approximate.

Compliance and Compatibility Notice

NOT ALL discs are compatible

- Subject to the restrictions described below and those noted throughout this Manual, including the Disc Type and Characteristics section of this user manual, disc types that can be played are: pre-recorded commercial BD-ROM, DVD-VIDEO, and Audio CD (CD-DA) discs; BD-RE/-R, DVD-RW/-R discs; and CD-RW/-R discs.
- Discs other than those listed above cannot be and are not intended to be played by this player. Some of the discs listed above may not play due to one or more reasons provided below.
- Samsung cannot assure that this player will play every disc bearing the BD-ROM, BD-RE/-R, DVD-VIDEO, DVD-RW/-R, DVD+RW/+R and CD-RW/-R logos, and this player may not respond to all operating commands or operate all features of every disc. These and other disc compatibility and player operation issues with new and existing format discs are possible because:
  - Blu-ray is a new and evolving format and this player may not operate all features of Blu-ray Discs because some features may be optional, additional features may have been added to the Blu-ray Disc format after the production of this player, and certain available features may be subject to delayed availability;
  - not all new and existing disc format versions are supported by this player;
  - new and existing disc formats may be revised, changed, updated, improved and/or supplemented;
  - some discs are produced in a manner that allows specific or limited operation or restricts features during playback;
  - some discs bearing the BD-ROM, BD-RE/-R, DVD-VIDEO, DVD-RW/-R, DVD+RW/+R and CD-RW/-R logos may still be non-standardized discs;
  - some discs may not be played depending on their physical state or recording conditions;
  - problems and errors can occur during the creation of Blu-ray Disc or DVD software and/or the manufacture of discs;
  - this player operates differently than a standard DVD player or other AV equipment; and/or
  - for reasons noted throughout this user manual and for other reason(s) discovered and posted by SAMSUNG customer care centre.
- If you encounter disc compatibility or player operation problems, please contact SAMSUNG customer care centre.
  You may also contact SAMSUNG customer care centre for possible updates on this player.
- For additional information on playback restrictions and disc compatibility, refer to the Precautions, Before Reading the user manual, Disc Types and Characteristics, and Before Playing sections of this user manual.

- **For Blu-ray Disc Player progressive scan output** : CONSUMERS SHOULD NOTE THAT NOT ALL HIGH DEFINITION TELEVISION SETS ARE FULLY COMPATIBLE WITH THIS product AND MAY CAUSE ARTIFACTS TO BE DISPLAYED IN THE PICTURE. IN CASE OF PROGRESSIVE SCAN PICTURE PROBLEMS, IT IS RECOMMENDED THAT THE USER SWITCH THE CONNECTION TO THE 'STANDARD DEFINITION' OUTPUT. IF THERE ARE QUESTIONS REGARDING OUR TV SET COMPATIBILITY WITH THIS product, PLEASE CONTACT OUR CUSTOMER SERVICE CENTER.

Copy Protection

- Because AACS (Advanced Access Content System) is approved as the content protection system for the Blu-ray Disc format, similar to use of CSS (Content Scramble System) for the DVD format, certain restrictions are imposed on playback, analogue signal output, etc., of AACS protected contents.
  The operation of this product and restrictions on this product may vary depending on your time of purchase as those restrictions may be adopted and/or changed by AACS after the production of this product. Furthermore, BD-ROM Mark and BD+ are additionally used as content protection systems for the Blu-ray Disc format, which imposes certain restrictions including playback restrictions for BD-ROM Mark and/or BD+ protected contents. To obtain additional information on AACS, BD-ROM Mark, BD+, or this product, please contact SAMSUNG customer care centre.
- Many Blu-ray Disc/DVDs are encoded with copy protection. Because of this, you should only connect your Player directly to your TV, not to a VCR. Connecting to a VCR results in a distorted picture from copy-protected Blu-ray Disc/DVDs.
- Under the U.S. Copyright laws and Copyright laws of other countries, unauthorised recording, use, display, distribution, or revision of television programs, videotapes, Blu-ray Discs, DVDs, and other materials may subject you to civil and/or criminal liability.
- **Cinavia Notice** : This product uses Cinavia technology to limit the use of unauthorised copies of some commercially-produced film and videos and their soundtracks. When a prohibited use of an unauthorised copy is detected, a message will be displayed and playback or copying will be interrupted. More information about Cinavia technology is provided at the Cinavia Online Consumer Information Centre at http://www.cinavia.com. To request additional information about Cinavia by mail, send a postcard with your mailing address to: Cinavia Consumer Information Centre, P.O. Box 86851, San Diego CA, 92138, USA.
  This product incorporates proprietary technology under licence from Verance Corporation and is protected by U.S. Patent 7,369,677 and other U.S. and worldwide patents issued and pending as well as copyright and trade secret protection for certain aspects of such technology. Cinavia is a trademark of Verance Corporation. Copyright 2004-2013 Verance Corporation. All rights reserved by Verance. Reverse engineering or disassembly is prohibited.

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